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Foreword

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Introduction

The growing application of systems, products, services and components of such that incorporate some form of artificial intelligence (AI) has led to a growing concern about how AI systems can potentially impact all levels of society. AI brings with it the promise of great benefits: automation of difficult or dangerous jobs, faster and more accurate analysis of large sets of data, advances in healthcare etc. However, there are concerns about reasonably foreseeable negative effects of AI systems, including potentially harmful, unfair or discriminatory outcomes, environmental harm and unwanted reductions in workforce.

The development and use of seemingly benign AI systems can have the potential to significantly impact (both positively and negatively) individuals, groups of individuals and the society as a whole. To foster transparency and trustworthiness of systems using AI technologies, an organization developing and using these technologies can take actions to assure affected interested parties that these impacts have been appropriately considered. AI system impact assessments play an important role in the broader ecosystem of governance, risk and conformity assessment activities, which together can create a system of trust and accountability.

ISO/IEC 38507, ISO/IEC 23894 and ISO/IEC 42001 all form important pieces of this ecosystem, for governance, risk and conformity assessment (via a management system) respectively. Each of these highlights the need for consideration of impacts to individuals and societies. A governing body can understand these impacts to ensure that the development and use of AI systems align to company values and goals. An organization performing risk management activities can understand reasonably foreseeable impacts to individuals and societies to appropriately incorporate into their overall organizational risk assessment. An organization developing or using AI systems can incorporate understanding and documentation about these impacts into its management system to ensure that the AI systems in question meet expectations of relevant interested parties, as well as internal and external requirements.

The act of performing AI system impact assessments and utilizing their documented outcomes are integral to activities at all organizational levels to produce AI systems that are trustworthy and transparent. To this end, this document provides guidance for an organization on how to both implement a process for completing such assessments and promote a common understanding of the components necessary to produce an effective assessment.

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